

Audio/Video Application

Infortrend RAID Storage Has Starring Role at *Digital Film Festival in Spain*

Business:

International digital cinema film festival in Barcelona

Challenge:

Create a system to store and play 22 full-length digital films

Solution:

EonStor® challenge for:

- *storing more than 40 hours of HD movies*
- *presenting high quality images*
- *delivering good reliability*
- *providing ease of use*

The cinema industry is entering an exciting period of change with the advent of Digital Cinema or D-Cinema. This new technology will affect all aspects of the movie industry including production, distribution and projection, and bring thrilling benefits to cinema visitors. As digital movies are much cheaper to make and distribute, there will be an explosion in the variety and quantity of movies made, while the excellent playback quality will remain constant no matter how many times an individual movie is played.

BARCELONA'S D-CINEMA PREMIERE

To showcase this new technology, the city of Barcelona hosted DiBa (Digital Barcelona Film Festival), an international festival of digital cinema held July 1-3, 2005. The "Club Capitol" served as an important meeting place to promote the advances in digital cinema to more than 7,000 members of the film industry. A selection of the best international digital cinema films from new talents as well as those from well-known directors was screened. In parallel with the screenings, daytime programs consisting of talks, live shows and workshops were run by companies specializing in digital technology. In the evenings, DiBa hosted free open air film shows presented by video jockeys in various clubs around the city.

HD CHALLENGES

A total of 22 films were scheduled to be screened during the three days of the festival which amounted to more than 40 hours of high definition (HD) digital material. A high-capacity, high-performance system was required that would enable eight different digital movies to be played to eight different screens simultaneously. An additional challenge lay in the lack of a consistent format of the material to be screened; all films needed to be in a uniform format and maintain consistent coding.

HIGH TECH RESOLUTION

The technology which enabled the screening of the entire program of events was designed and built by three companies: Apuntolapospo, Digital Innovation Systems and SM Data, an Infortrend Europe Ltd. distributor in Spain. The result of this collaboration is the StoreData Cinema Server. The StoreData Cinema Server is comprised of three main components: post-production, mastering and digital feed by Apuntolapospo; software to control the feed, create the film sequences and ads, and manage content and peripheral systems from Digital Innovation Systems; and a server and RAID storage system provided by SM Data. At the heart of the StoreData Cinema

Server is the Infortrend EonStor array with a capacity of 4TB, configured in RAID 5. The EonStor A16F-G2221 features a Fibre Channel interface and SATA-II disk drives with Infortrend's ASIC266 RAID controller. This fault-tolerant subsystem stored all 40 hours run time which made up the festival's entire program. The distinguishing feature of this solution lies in its ease of use, as special knowledge is not required to operate the system, making this solution extremely user-friendly. During the festival individuals were invited to use the system, and due to its ease of use were able to operate it after only ten minutes of instruction.

WINNING PERFORMANCE

The high quality of the projected images was universally admired by the festival attendees. "A significant factor of the picture quality can be attributed to the 386MB per second bandwidth provided by the EonStor RAID subsystem," said Alex Young, Technical Director of Infortrend Europe. "A demonstration of converting disparate code formats to a consistent digital code further highlighted the versatility of the system, as it only took a matter of minutes to modify the playlist."

FINALE

Jordi Sabiol, General Manager of SM Data, added, "The system clearly demonstrated the advantages of digital cinema over conventional film including the management, distribution and screening. With reference to the server, specific material formats are not required as any tape format is accepted. Changes to the programming are carried out with ease and are made via just a central server." A further advantage of the StoreData Cinema Server is the excellent picture quality which is maintained even after numerous screenings of a particular movie. Finally, the system offers a significant reduction in material transportation costs. Digital tapes are far lighter and smaller than conventional film stock, so distribution is a fraction of the cost of standard cinema film.



About SM DATA

SM Data offers specific storage solutions for audio-visual production, post production, cinema and digital TV.
www.smdata.com